

- Fig. 4. Sensory bristles situated in the midst of the preceding structures.
 Fig. 5. Left palp.
 Fig. 6. Right mandible.
 Fig. 7. Left maxilla.
 Fig. 8. Right labial palp.
 Fig. 9. Caudal appendages.
 Fig. 10. Cirrus of the 6th pair of cirri.
 Fig. 11. Penis (free extremity).

XXIII.—*Two Spiders new to the British Fauna.* By GEORGE H. CARPENTER, B.Sc. Lond., of the Science and Art Museum, Dublin.

DURING the past few years I have received consignments of spiders for identification from Mr. A. Randell-Jackson, of Southport, collected by him in various parts of Northern England and the Isle of Man. Many of his captures are of considerable faunistic interest, and these will be duly recorded in local lists. Two species, however, are of particular importance, being undoubtedly additions to the British fauna, and one of them seems to be new to science. Both were obtained in the neighbourhood of Southport.

Family Agelenidæ.

Genus AGELENA, Walck.

Agelena longipes, sp. n. (Figs. 1-5.)

Female.—Length 12·5 millim.; length of carapace 5·5 millim.; breadth 4 millim.; length of legs i., ii., iii., iv. respectively 20, 18·5, 18, 24 millim.

Eyes of hind row equal to each other; centrals a diameter apart, each lateral a diameter and a half from its neighbouring central. Front lateral eyes of same size as hind laterals, which they almost touch, each a diameter from neighbouring front central. Front centrals larger than the other eyes, half a diameter from each other, a diameter from the hind centrals (figs. 2, 3).

Epigyne forming a simple deep rounded depression, broader than long, with thickened edges; a dark horseshoe-shaped area in front of it (fig. 4).

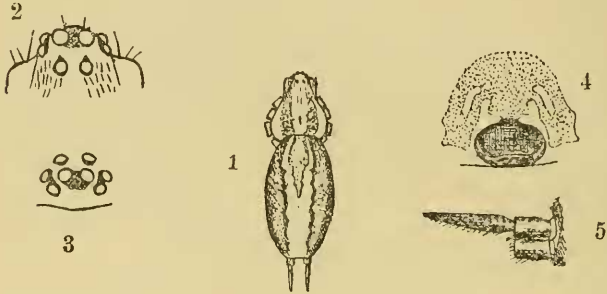
Upper spinnerets with the terminal segment flattened and pointed and fully twice as long as the proximal (fig. 5).

Carapace yellowish brown, with a fine black marginal line and a broad brown band with black markings on either

side. *Sternum* reddish brown, with a black horseshoe-shaped marking, open in front, drawn out behind, and reaching to the apex.

Legs remarkably long, the hindmost being nearly twice as long as the body; reddish brown, with a few dark markings on the thighs.

Abdomen dark brown above, with a central clear yellowish longitudinal band, bounded by a wavy black line, and slightly expanded in front, where it encloses a lance-shaped red marking with serrate edges (fig. 1). Abdomen beneath yellowish white, with central black longitudinal band. *Spinnerets* reddish brown, the terminal segment in the upper pair darker.



Agelena longipes, sp. n.

- Fig. 1.—Female (without appendages), dorsal view, $\times 2$.
 Fig. 2.—Head-region and eyes, dorsal view, $\times 7$.
 Fig. 3.—Eyes, face view, $\times 7$.
 Fig. 4.—Epigyne, $\times 7$.
 Fig. 5.—Spinnerets from side, $\times 7$.

Locality. Lancashire (Southport).

The specimen described above was taken on a bunch of flowers which had been brought indoors from a garden. It is possible therefore that the species may prove to be an introduced exotic; but I have failed to find a description of an *Agelena* from any part of the world that agrees with this form.

The genus *Agelena* has been hitherto represented in our fauna only by the well-known *A. labyrinthica* (Clerck); it is by no means impossible that *A. longipes* will turn out to be a truly indigenous species.

A. longipes may be distinguished at a glance from *A. labyrinthica* by its smaller size, brighter coloration, and relatively

longer legs and spinnerets, as well as by the altogether different form of the epigyne. The European species to which *A. longipes* comes nearest is *A. agelenoides* (Walck.) *, a South European spider showing a very similar abdominal pattern to that of the present species. But the female of *A. agelenoides* also has much shorter legs and spinnerets than *A. longipes* and a very differently shaped epigyne.

In the last-named character *A. opulenta*, L. Koch †, from Japan, shows considerable likeness to *A. longipes*, but this species again has relatively short legs and apparently a unicolorous yellowish-brown abdomen.

On the whole *A. longipes* seems most nearly related to the North American *A. nævia*, Walck. ‡, which has the legs relatively longer than in the European *Agelenæ*. But though the general structure of the epigyne is similar, none of its forms as figured by Emerton agrees with that of our spider, and the American species has no lance-shaped marking on the abdomen, while the terminal segments of its upper spinnerets are relatively short and cylindrical. I have to thank the Rev. O. P. Cambridge for kindly sending me Canadian specimens of *A. nævia* for comparison.

Family Argiopidæ.

Subfamily ERIGONINÆ.

Genus CNEPHALOCOTES, Simon §.

Cnephalocotes silus (Camb.). (Figs. 6-15.)

Erigone sila, Camb. Proc. Zool. Soc. 1872, p. 753, pl. lxxv. fig. 7.

Cnephalocotes pusillus, Simon, Arachn. France, v. (1884) pp. 706-7 (nec *Microneta pusilla*, Menge, Preuss. Spin.).

Cnephalocotes silus, Chyzer and Kulczynski, Aran. Hungar. ii. (1894) pp. 118-9, pl. iv. fig. 41.

Several specimens of this interesting addition to the British spider-fauna have been taken on the coast sandhills at Southport by Mr. Randell-Jackson during the early months of this year. Full descriptions of the species are given by the authors referred to in the above synonymy. A few structural figures may assist British students of spiders to discover fresh localities for it. Aspects of the male palp somewhat

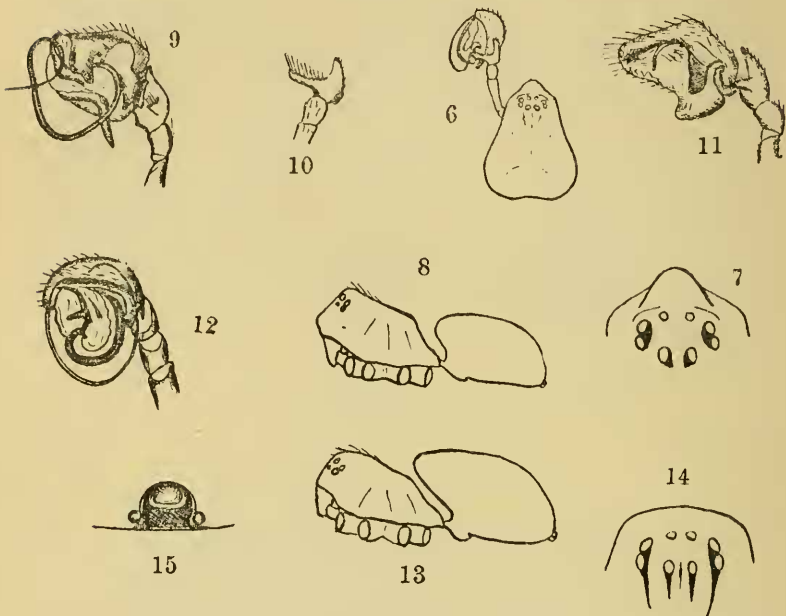
* Simon, Arachn. France, ii. pp. 115-6.

† Verh. zool.-bot. Gesell. Wien, xxvii. (1877) pp. 757-9.

‡ Emerton, Trans. Conn. Acad. viii. (1890) pp. 197-200, pl. viii. figs. 1-1 n. *A. californica*, Banks (Journ. N. Y. Ent. Soc. iv. (1896) pp. 89-90), seems a nearly allied form.

§ E. Simon, Arachn. de France, v. (1884) p. 699; Hist. Nat. Araignées, 2^e éd. (1892) tome i. p. 650.

different from those drawn by former observers are given (figs. 9-12). The female, fully described by M. Simon, is, I believe, now figured for the first time. The epigyne (fig. 15) is very characteristic, consisting of a simple semi-circular cavity, with a truncate tongue-like process within its forward region and a rounded tubercle on either side.



Cnephalocotes silus (Cb.).

- Fig. 6.—Carapace of male, with left palp, $\times 20$.
 Fig. 7.—Front end of carapace, showing eyes, $\times 60$.
 Fig. 8.—Side view of male without appendages, $\times 20$.
 Fig. 9.—Left palp of male from side-front, $\times 40$.
 Fig. 10.—Genua and tibia of left palp from above, $\times 40$.
 Fig. 11.—Left palp from side (spines removed), $\times 40$.
 Fig. 12.—Left palp from below, $\times 40$.
 Fig. 13.—Outline of female, $\times 20$.
 Fig. 14.—Eyes of female from above, $\times 60$.
 Fig. 15.—Epigyne, $\times 40$.

The type of this species (with which Mr. Cambridge has very kindly compared one of Mr. Randell-Jackson's specimens, confirming my identification) came from Nuremberg,

Bavaria. M. Simon records the spider from both the north and south of France and from Corsica, while MM. Chyzer and Kulczynski found it on the Croatian shore of the Adriatic (Fiume). It seems therefore to belong to a southern distributional type.

This is the fourth species of *Cnephalocotes* which has been added to the British list within recent years. The genus was represented in our fauna only by *C. obscurus* (Bl.) * until 1888, when Mr. Cambridge described as a new species *C. interjectus* † from Hertfordshire; this spider, lately recorded from the Edinburgh district ‡, is now believed to be identical with *C. laesus*, L. Koch §, from Central Siberia. In 1894 two more species of *Cnephalocotes*—*C. curtus*, Simon, and *C. elegans*, Camb.—were added to the British list ||, the former occurring on the shores of the Firth of Forth, the latter in Inverness-shire. *C. curtus* has since been found on the west coasts of Scotland and Ireland ¶. *C. silus* makes, therefore, the fifth species of the genus known to inhabit our islands.

The species of *Cnephalocotes* are small dark-coloured spiders with strongly chitinized skin and short blunt carapace; eyes small, those of the hinder row moderately procurved, the centrals nearer to each other than to the laterals **. The very wide sternum is produced between the hindmost haunches in a broad, blunt, rounded process. The legs are short and stout, the front tarsi being fusiform (especially in the male) and nearly as long as the metatarsi. The tibia of the male palp is usually broad and truncate, with one or two short processes; the tarsus is always large and the bulb prominent, with a free-ended, coiled, thread-like spine.

The males of our British species may be tabulated thus:—

- I. Head-region more or less elevated, distinct impressions running backward from lateral eyes.
1. Tibia of palp above with an internal blunt and

* Blackwall, Spid. Gt. Brit. Irel. (1864) pp. 297–8, pl. xx. fig. 212.

† O. P. Cambridge, Trans. Herts. Nat. Hist. Soc. v. (1888) p. 18; Proc. Dorset Field-Club, x. (1889) pp. 121–2, pl. A. fig. 6.

‡ O. P. Cambridge, Proc. Dorset Field-Club, xvii. (1896) p. 60.

§ L. Koch, Kongl. Svensk. Vetensk.-Akad. Handl. xvi. (1878) no. 5, p. 67, pl. ii. fig. 19. See W. Kulczynski, 'Fauna Araneorum Austriae inferioris' (Cracow, 1898), pp. 63–4.

|| O. P. Cambridge, Proc. Dorset Field-Club, xv. (1894) p. 112, fig. 4; G. H. Carpenter and W. Evans, Proc. R. Phys. Soc. Edinb. xii. (1894) pp. 572–3; Ann. Scot. Nat. Hist. 1894, p. 232.

¶ G. H. Carpenter, Proc. R. Irish Acad. (3) v. (1898) p. 162.

** In the large and closely allied genus *Lophocarenum*, Menge, the eyes of the hind row are equidistant and the row greatly procurved; also the skin in *Lophocarenum* is more strongly coriaceous.

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|---|---|
| a central tooth-like process. Cephalic lobe distinct | <i>obscurus</i> (Bl.). |
| 2. Tibia of palp above with a single, short, sharp process pointing outward. Cephalic lobe distinct | <i>elegans</i> (Cb.). |
| 3. Tibia of palp above with a rather long, sinuous, sharp-pointed process. Head-region only slightly elevated | <i>læsus</i> (L. K.), =
<i>interjectus</i> , Cb. |
| II. Head-region not elevated; no impressions behind lateral eyes. | |
| 1. Clypeus strongly conical | <i>silus</i> (Cb.). |
| 2. Clypeus vertical; tibia of palp above with a very short, straight, sharp-pointed process | <i>curtus</i> (Simon). |

XXIV.—*An undescribed Type of Rusine Deer.*

By R. LYDEKKER.

IN my work 'The Deer of All Lands' a brief notice *, together with a photograph, was given of three peculiar male Rusine deer at that time living in the collection of the Duke of Bedford at Woburn Abbey. They were of small size—a little larger than a hog-deer—and agreed in general character with the members of the Sambar group, although differing from all named forms by the complexity of the antlers. No name was given to these deer, on account of the possibility of their proving to be abnormalities or hybrids, or even the adult of *Cervus culionensis*. No definite information is available with regard to their place of origin, although it is very probable that they came from the Philippines.

One of the three specimens has since died and been presented by the Duke and Duchess of Bedford to the British Museum, where its skin is now mounted. A closer examination is now practicable than was the case during life, and as the result of this I feel justified in describing the mounted specimen as the type of a new species of Rusine deer, since it appears different from any named form, and there seems little probability that its peculiar characters are due either to abnormality or to hybridism.

As mounted, the specimen stands 30 inches in height at the withers. In general form, and especially in the large size of the face-glands, it agrees with the Rusine group (subgenus *Rusa*). From all the various races of the sambar (*Cervus*

* Page 171, fig. 45.